OPEN LETTERS.

BROMUS SECALINUS GERMINATING ON ICE.

To the Editors of the Botanical Gazette:—In the summer of 1895, G. H. True brought into the botanical laboratory some cakes of ice taken from the margin or top of the mass in the ice house, where the straw came in contact with them. Among the rubbish were a considerable number of grains of oats, chess, and perhaps seeds of other plants. Right in contact with the ice were kernels of chess with plumules half to three-fourths of an inch long and roots, some of which were very nearly two inches long. Numerous roots of chess in their growth had penetrated the clear ice for most of their length by thawing small holes with a diameter about three times that of the roots. Some of the roots curved more or less, but were easily removed.—W. J. BEAL, *Agricultural College, Mich.*

THE METRIC SYSTEM AND THE "ILLUSTRATED FLORA."

To the Editors of the Botanical Gazette:—Referring to your editorial in the February GAZETTE concerning the use of the metric system, in which you express your regret that it was not taken up in *Illustrated Flora*, I submit the following extracts from correspondence which will indicate our position in the matter.

Regents Office, Albany, N. Y., Feb. 18, 1897

Dear Professor Britton:

The enclosed seems to me a just criticism, unless you have some special reason for sticking by the old measure, instead of using the metric I admire so much your book that I was sorry to see you using the old measures.

Yours very truly,

MELVIL DEWEY.

New York City, Feb. 23, 1897

Dear Sir:

Dr. Britton has enclosed to me your favor of the 18th inst., with Professor Bessey's notes from the *Naturalist* on the metric system, and the omission of the *Illustrated Flora* to adopt it.

No doubt you are both quite right, looking at the subject from a scientific point of view alone. But the work, while intended to be as perfect as possible within the necessary limits, had to be arranged partly in reference to the general public. The work is planned not only for professors and students,

but for plant lovers everywhere, and to stimulate interest in our flora among the people at large. The difficulties in comprehending the text, therefore, ought to be as few as possible. The adoption of the metric system would have added very sensibly to these difficulties, in matters of size, in which the unlearned are quite as much interested as the learned. Works depending on scientific patronage alone, and scientific publications by the government, may rightly adopt the metric notation; but the public at large, I think, can only be brought to it gradually, through the use of it in the primary schools.

Very truly yours,

ADDISON BROWN.

A comparative tabulation of the metric and English units will be printed in the third volume of *Illustrated Flora*.— N. L. BRITTON, *New York Botanical Garden*.

OVERSIGHT OF AMERICAN PUBLICATIONS.

To the Editors of the Botanical Gazette:— The attention of botanists should be called to the following somewhat glaring oversight of an important botanical paper. In 1892 Dr. Thaxter[1] published a paper entitled "On the Myxobacteriaceæ, a new order of Schizomycetes." One would have supposed that such a title would itself have attracted general attention. His paper is very complete, basing the new order of Schizomycetes upon the description of the structure and development of eight species in three genera, and is very well illustrated. This important contribution does not appear to have been noticed by Hugo Zukal,[2] who has recently founded a new order of Myxomycetes apparently upon a form identical with one of the species included in Dr. Thaxter's paper. As far as one may judge safely from a comparison of descriptions and figures, Zukal's *Myxobotrys variabilis* seems to be identical with *Chondromyces crocatus* B. & C. as described by Dr. Thaxter.

In respect to the structure of the plasmodium-like condition, together with the structure and development of the cystophores (Sporenträger) and cysts (Sporen) we find some important differences in the results obtained by these two investigators. Zukal finds granular matter in the substance of the plasmodium stage and some of it in the form of rods, but he considers them all to be microsomata. When the cystophores are developed the "rod-like microsomata disappear and in their places are found numerous long threads." Thaxter finds the pseudo-plasmodium to be made up of rod-like bodies whose general structure "together with their vegetative multiplication by fusion renders their schizomycetous nature as individuals a matter hardly to be doubted." When the fructification is to be developed the rods swarm

[1] BOT. GAZETTE, 17: 389–406, *pl. 22–25*. 1892.

[2] Myxobotrys variabilis Zuk. als Repräsentant einer neuen Myxomyceten-Ordnung. Ber. Deut. Bot. Gesell. 14: 340. 1896.